

IN RESPONSE TO THE OFFICE ACTION:

In response to the Office Action applicant has considered the Examiner's selection of Colussi et al. (U.S. 5,591,243) but respectfully disagrees that it meets the teaching requirements of an anticipating reference under 35 U.S.C. §102.¹ Applicant submits that the pertinence of Colussi et al., with particular reliance on Figure 1, is not apparent. The reference teaches an in-line filter that removes liquids and solids from a compressed air line while the present invention prevents entry of particles into a vehicle transmission using a self-cleaning venting component that is open to the atmosphere.

According to the "Abstract" of the reference, Colussi et al. teaches a device for separating liquid from compressed air. The device is easy to maintain and includes a cylindrical housing having an inlet opposite an outlet for coupling the housing into the installation. Inside the housing, a plurality of cones form a vertical pile. Fluid entering the inlet collides with cone deflector surfaces causing the fluid to follow a helical path through the pile. The housing may contain a particle filter located between the last cone and the outlet (emphasis added).

The disclosure of Colussi et al. relates to cleaning compressed air in compressed air circuits. This is apparent from the "Background of the Invention" at column 1, lines 15 – 16, lines 23 – 26, and lines 40 – 42, for examples. These reference portions clearly address that, "[p]iping installations transporting compressed air are widely used - - ." "It is well known for compressed air circuits to be subject to the presence of undesirable elements - - ." and "The problem can be solved by conveniently installing liquid separators and solid filters at strategic points of the installation."

As the reference title states, Colossi et al. clearly teaches a "Liquid Trap for Compressed Air" that may also include a filter element for removal of solid particles. One or more liquid traps, placed in piping installations, remove liquid and optionally solid particles from compressed air circuits. The term "circuit" suggests a closed system.

¹ Rejection of claims "for want of novelty" requires an examiner to cite the best available references at his or her command and to clearly explain the pertinence of each reference, if this is not apparent (37 CFR 1.104(b)(2)).

Therefore, U.S. 5,591,243 discloses a separator for compressed air systems. The purpose of this arrangement is to separate liquid particles (by a cone-pile separator) and solid particles (by a filter) from a compressed air system.

CLAIMS REJECTIONS – 35 U.S.C. §102

Discussion of differences between the present invention and the reference includes a table providing requirements of claim 1 of the present invention and a summary of teachings of Colussi et al. as follows:

COMPARISON OF THE PRESENT INVENTION WITH TEACHINGS OF THE REFERENCE (COLUSSI ET AL.)

Claims Requirements of the Present Invention	Colussi et al. U.S. 5,591,243
Claim 1 recites, “A device for the ventilation of a transmission case - - .”	Colussi et al. is silent regarding a ventilating device for a transmission case. The device of Colussi et al. is a filter suitable for insertion in a compressed air system or circuit to remove liquids and optionally solid particles from compressed air circulating in the system.
Claim 1 recites, “ - - a passage connected between a residual volume of air inside the transmission case and atmospheric pressure outside the transmission case - - the passage comprising a first section with a certain flow area and a second section - - -, the first section being situated between the atmosphere and the second section; - - .”	The reference does not teach either a residual air volume or a device having a portion open to the atmosphere. Colussi et al. teaches a device that has an inlet 11E and an outlet 11S placed in a compressed air circuit with the upstream compressed air pipe joined to the inlet and the downstream compressed air pipe joined to the outlet (see Abstract and column 3, lines 54 – 63, for example).
Claim 1 further recites, “a compressed air source connected to the passage between the inside of the transmission case and the first section.”	As indicated previously, Colussi et al. teaches both the inlet 11E and the outlet 11S have connection to compressed air. The system of Colussi et al. operates at pressures higher than atmospheric pressure.

Evidence obtained by comparing the teachings of the reference with claim 1 of the present invention indicates that this claim is allowable over Colussi et al. In view of the above, Applicant requests reconsideration and withdrawal of the rejection of claim 1 under 35 U.S.C. §102(b). In the following section, additional evidence shows that all claims pending currently should be allowed.

MPEP §700 refers to “Examination of Applications.” Under the heading “Improperly Expressed Rejections” section 707.07(d) states, “A plurality of claims should never be grouped together in a common rejection, unless that rejection is equally applicable to all claims in the group.”

The Office Action of October 26, 2005 applies a common rejection to all claims as a single group of claims. As expressed, the rejection of claims 1-13 over Colussi et al. appears to be improper and somewhat perfunctory. For example, statements found in the Office Action are incorrect since Colussi et al. fails to teach structure attributed to the reference by the Examiner, as follows:

1. “a passage connectable the volume of air inside the (transmission) case (1) and the atmosphere outside the (transmission) case, - -.” Colussi teaches an in-line, compressed air filter positioned with each end, inlet and outlet, connected to compressed air lines carrying air at pressures above atmospheric pressure.
2. “ - - an expansion portion (1) that tapers to a neck opening (11E), which is much smaller than the expansion section (1), leading to atmospheric air that is to be drawn into the device, - - .” The reference teaches compressed air not atmospheric air entering the filtration device taught by Colussi et al.
3. “ - - the expansion portion (1) being positioned downstream to the neck opening (11E) and having a large area to cause suspended particles swept through the neck opening (11E) to fall out of suspension and be trapped therein, and a compressed air source (col. 1, lines 15 – 22, col. 4, lines 4 – 5) (see details of Fig. 1).” The details of Fig. 1 of the reference reinforce the description at column 4, lines 55 – 67 teaching the combined effect wherein “attenuating passages 17 and the superposed cones 2 drives the flow of air through an approximately helicoidal path.”

In actuality, the arrangement according to Figure 1 of US 5,591,243 teaches a plurality of deflector cones 2 to separate liquid from the air and a filter 31 for retention of solid particles. Separation of liquid and solid particles occurs due to structure designed into the device of Colussi et al. The possibility of suspended particles falling out of suspension appears to be speculative as it is not taught by the reference and is improbable considering the relatively high velocity of compressed air.

An apparatus for venting a transmission according to the present invention does not use a filter for the solid particles (such as sand and salt). This feature provides a maintenance-free device (see e.g. the description at the end of paragraph [0002] and paragraph [0003]). United States Patent No. 5,591,243, to Colussi et al. teaches an exchangeable filter element (see col. 3, lines 1 – 2) that is not maintenance-free.

The reference is silent concerning venting a transmission case and preventing entry of particles from outside the transmission case. Colussi et al. is also silent regarding other connections including those to a residual volume of air inside a transmission casing, the atmosphere and a compressed air source as recited in claim 1 of the present invention.

The Office Action does not provide an explanation of rejection on a claim-by-claim basis. This suggests that the limitations of the **claims** were not fully considered. Independent claim 9, for example, includes the limitation, “a compressed air source connected to the device and configured to backwash trapped particles from within the expansion portion.” (emphasis added). This refers to periodic cleaning of the device by a pressure surge produced during activation of the ventilation port 18 (see e.g. paragraph [0011] of the present application). Colussi et al. does not teach backwashing to remove trapped particles, but either requires filter maintenance (see column 5, lines 4 – 8) or liquid draining, under gravity, down through the piping (see column 5, lines 1 – 4). Gravitational liquid drainage differs from intentional backwashing using compressed air according to claim 9 and the description of the present invention.

Evidence shows that Colussi et al. fails to teach all the limitations of claim 1 and claim 9. This means that independent claims 1 and 9 and dependent claims adding further

limitation to these claims should be allowed. Colussi et al. requires a particle filter and thereby fails to teach the "filterless device" of independent claim 12, which should also be allowed along with claim 11 that depends from claim 12.

In view of the above, Applicant requests the reconsideration and withdrawal of the rejection of claims 1-13 under 35 U.S.C. §102(b).

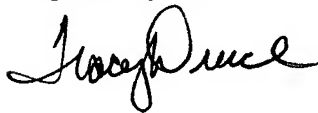
Applicant has made an earnest attempt to respond to all the points included in the Office Action and, in view of the above, submits that the application is in condition for allowance. Request is respectfully made for reconsideration of the application and notification of allowance of claims 1 - 13 in the next paper from the Office.

The undersigned representative requests any extension of time that may be deemed necessary to further the prosecution of this application.

The undersigned representative authorizes the Commissioner to charge any additional fees under 37 C.F.R. 1.16 or 1.17 that may be required, or credit any overpayment, to Deposit Account No. 14-1437, referencing Order No. 07589.0063.PCUS00.

In order to facilitate the resolution of any issues or questions presented by this paper, the Examiner should directly contact the undersigned by phone to further the discussion.

Respectfully submitted,



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